



EUROPEAN PATENT APPLICATION

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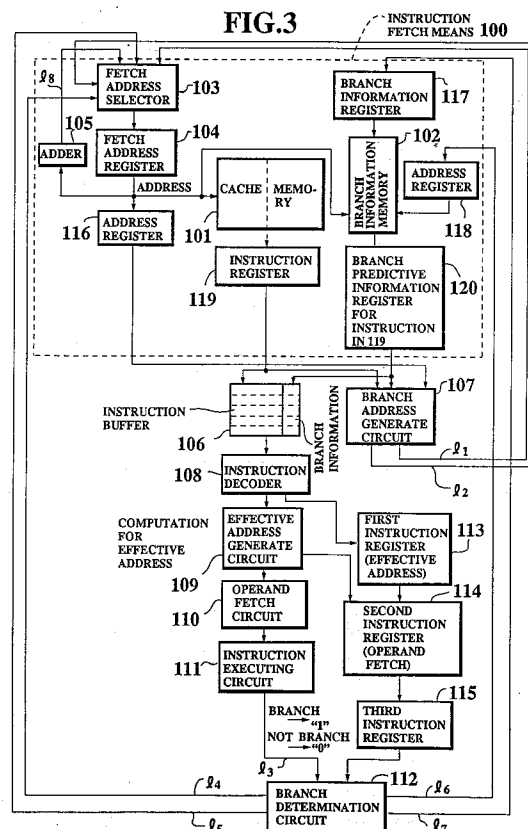
Hoffmann, Eitle & Partner Patentanwälte

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54 **Branch instruction control unit based on a pipeline method.**

57) Disclosed is a branch instruction control unit based on a pipeline method comprising cache memory means(101), branch information means(102), branch address generation means(107), fetch means(100), instruction decode means(108), and instruction executing means(111). In the unit, when the branch instructions are fetched, the branch is predicted in accordance with the branch predictive information in the branch information memory(102). Then, when establishment of the branch is judged, the target addresses are calculated by the branch address generation means 107) before decoding of the branch instructions, and the instructions designated by the target addresses are fetched from the cache memory means(101) to carry out a series of the pipeline processes.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 90 10 6292

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
P,X	EP-A-0 320 098 (INTERNATIONAL COMPUTERS LIMITED) 14 June 1989 * page 2, line 24 - line 28 * * page 3, line 26 - line 39 * * page 4, line 20 - page 5, line 29 * * page 5, line 55 - page 6, line 26 * ---	1-7	G06F9/38
Y	PATENT ABSTRACTS OF JAPAN vol. 7, no. 130 (P-202)7 June 1983 & JP-A-58 048 144 (NIPPON DENKI K. K.) 22 March 1983 * abstract * ---	1-7	
Y	THE 8TH ANNUAL SYMPOSIUM ON COMPUTER ARCHITECTURE May 1981, MINNEAPOLIS, MINNESOTA, US pages 135 - 148; J. E. SMITH: 'A Study of Branch Prediction Strategies' * page 139, left column, " Strategy 5 " * ---	1-7	
A	PATENT ABSTRACTS OF JAPAN vol. 6, no. 062 (P-111)21 April 1982 & JP-A-57 003 142 (MATSUSHITA ELECTRIC INDUSTRIAL COMPANY LTD) 8 January 1982 * abstract * ---	1-7	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	IBM TECHNICAL DISCLOSURE BULLETIN, vol. 29, no. 1, June 1986, NEW YORK US pages 357 - 359; 'Branch-Processing Instruction Cache' * the whole document * -----		G06F
The present search report has been drawn up for all claims			
Place of search THE HAGUE	Date of completion of the search 10 JULY 1992	Examiner DASKALAKIS T.	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			